Student Scientist Project 1

What Makes a Happy Plant?

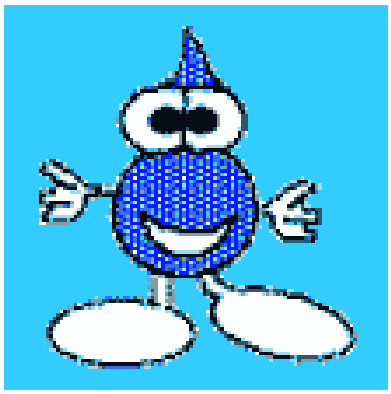
Sunlight

Plants need a few things in order to live and grow the list is short but very important:

Air

CO_2

Water



Super Scientist:
You will investigate what plants really need…

How to be a scientist:
In this experiment – you scientists will look at what plants need to survive – Air, Water, and Light.

- Set up the plants with your teacher
- Listen carefully and follow directions.
- All plants should be near a window to get sunlight
- Check all plants after few days, for growth - measure with a ruler.

Setting up the Experiment:
Each plant will be different –

1. Plant 1 has water, light, and air
2. Plant 2 has water, light, and no air
3. Plant 3 has water, no light, and no air
4. Plant 4 has water, no light, and air
5. Plant 5 has no water, light and air
6. Plant 6 has no water, no light and air
7. Plant 7 has no water, light, and no air
8. Plant 8 has no water, no light and no air

Running the Experiment:

1. **So what do you think? Which plant will grow best? Put a check mark by the number of plant you think will grow the most:**
    1. **Plant** _____
    2. **Plant** _____
    3. **Plant** _____
    4. **Plant** _____
    5. **Plant** _____
    6. **Plant** _____
    7. **Plant** _____
    8. **Plant** _____

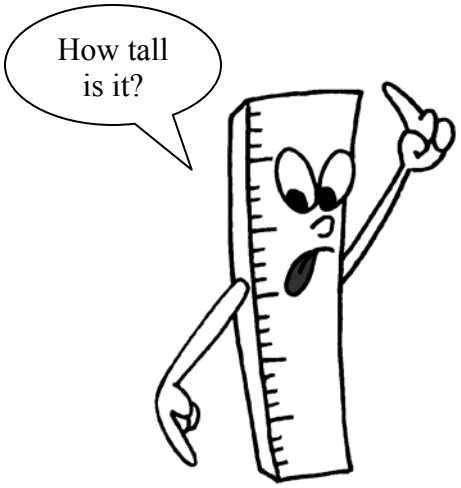
Why? _____

HYPOTHESIS – I think plant number _____ will grow the best because

_____

Running the Experiment:

2. **So what do you think? Measuring up – measure each plant and record its height on the line next to the number:**



1. **Plant** _____ **cm tall**
2. **Plant** _____ **cm tall**
3. **Plant** _____ **cm tall**
4. **Plant** _____ **cm tall**
5. **Plant** _____ **cm tall**
6. **Plant** _____ **cm tall**
7. **Plant** _____ **cm tall**
8. **Plant** _____ **cm tall**

Measure from the base of the plant in the pot to the top – do not stretch the plant.

Setting up the Experiment:

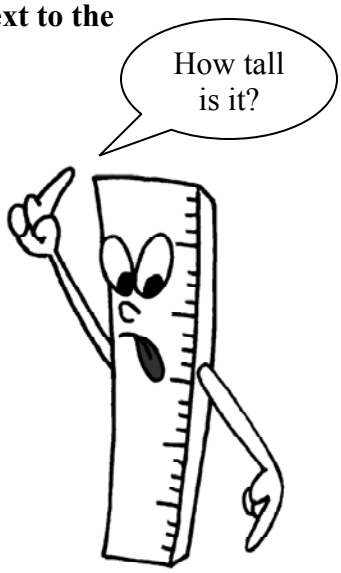
Each plant will be different. Set up the plants in this order with your teacher –

1. Plant 1 has water, light, and air
2. Plant 2 has water, light, and no air
3. Plant 3 has water, no light, and no air
4. Plant 4 has water, no light, and air
5. Plant 5 has no water, light and air
6. Plant 6 has no water, no light and air
7. Plant 7 has no water, light, and no air
8. Plant 8 has no water, no light and no air

Listen Carefully and Follow Directions

Concluding the Experiment:

3. **So what do you think? Measuring up – measure each plant, after a week and record its height on the line next to the number:**



1. **Plant _____ cm tall**
2. **Plant _____ cm tall**
3. **Plant _____ cm tall**
4. **Plant _____ cm tall**
5. **Plant _____ cm tall**
6. **Plant _____ cm tall**
7. **Plant _____ cm tall**
8. **Plant _____ cm tall**

Measure from the base of the plant in the pot to the top – do not stretch the plant.

Running the Experiment:

4. **So what happened? Which plant grew the best? Put a check mark by the number of plant that grew the most:**

1. **Plant _____**
2. **Plant _____**
3. **Plant _____**
4. **Plant _____**
5. **Plant _____**
6. **Plant _____**
7. **Plant _____**
8. **Plant _____**

CONCLUSION –Plant number _____ grew the best, because

Plants need _____, _____ and _____ to grow.